

**In the Claims:**

Please cancel claims 1 to 18 without prejudice and add the following claims 19 to 44:

Claims 1 to 18 (canceled).

19(new). A method of producing road or street section data for a digital map, said method comprising the steps of:

- a) providing a vehicle (7) with an image producing device (1) and a position determining device (4), said image producing device (1) comprising means for generating image data of surroundings of the vehicle and said position determining device (4) comprising means for generating vehicle position data;
- b) driving said vehicle over at least one road or street section (8);
- c) during the driving of the vehicle of step b), simultaneously collecting said image data with said image producing device (1) and acquiring said vehicle position data with said position determining device (4), wherein the vehicle position data comprises an orientation of said vehicle in relation to an origin of a fixed first coordinate system (24);
- d) analyzing said image data with an image processing means (2), in order to put together or assemble a road or street section description; and
- e) correlating said vehicle position data and said road or street section description with a correlation means (5), in order to produce said road or street section data for said digital map.

20(new). The method as defined in claim 19, wherein said vehicle position data comprises at least one absolute position of said vehicle (7) in relation to said fixed first coordinate system (24).

21(new). The method as defined in claim 19, wherein said origin of said fixed first coordinate system (24) coincides with an origin of said digital map.

22(new). The method as defined in claim 19, wherein said road or street section description produced from said image data includes a course of the at least one road or street section (8) relative to the vehicle (7), a spacing (10) between a vehicle longitudinal axis (L) and a street or road edge (E), a width (12) of the at least one street or road section (8), a number of lanes (9) on the at least one road or street section (8), a width (11) of a lane (9) in which the vehicle (7) travels, a curvature of the at least one street or road section (8), standing or parking space information, cycle lane information, lane quality information, traffic sign information, building information or alternative lane guidance.

23(new). The method as defined in claim 19, wherein the road or street section data includes a statement regarding a course of at least one road or street section (8) in relation to said fixed first coordinate system (24).

24(new). The method as defined in claim 19, further comprising comparing said road or street section data produced by said driving of said vehicle with pre-

existing road or street section data from a pre-existing digital map (19) by means of a comparison means (21) in order to detect contingent deviations and correcting or updating said pre-existing digital map with said contingent deviations obtained during the comparing.

25(new). The method as defined in claim 24, further comprising transmitting said contingent deviations or said road or street section data produced by said driving of said vehicle to a central station (26) for reception by the central station (26).

26(new). A method of producing road or street section data for a digital map, said method comprising the steps of:

- a) providing a vehicle (7) with an image producing device (1) and a position determining device (4), said image producing device (1) comprising means for generating image data of surroundings of the vehicle and said position determining device (4) comprising means for generating vehicle position data;
- b) driving said vehicle over at least one road or street section (8);
- c) during the driving of the vehicle of step b), simultaneously collecting said image data with said image producing device (1) and acquiring said vehicle position data with said position determining device (4);
- d) analyzing said image data with an image processing means (2), in order to put together or assemble a road or street section description, wherein said road or street section description includes standing or parking space

information, cycle lane information, lane quality information, building information or alternative lane guidance; and

e) correlating said vehicle position data and said road or street section description with a correlation means (5), in order to produce said road or street section data for said digital map.

27(new). The method as defined in claim 26, wherein said vehicle position data comprises at least one absolute position of said vehicle (7) and an orientation of said vehicle (7) in relation to a fixed first coordinate system (24).

28(new). The method as defined in claim 27, wherein said origin of said fixed first coordinate system (24) coincides with an origin of said digital map.

29(new). The method as defined in claim 26, wherein the road or street section data includes a statement regarding a course of at least one road or street section (8) in relation to said fixed first coordinate system (24).

30(new). The method as defined in claim 26, further comprising comparing said road or street section data produced by said driving of said vehicle with pre-existing road or street section data from a pre-existing digital map (19) by means of a comparison means (21) in order to detect contingent deviations and correcting or updating said pre-existing digital map with said contingent deviations obtained during the comparing.

31(new). The method as defined in claim 30, further comprising transmitting said contingent deviations or said road or street section data produced by said driving of said vehicle to a central station (26) for reception by the central station (26).

32(new). A method of producing road or street section data for a digital map, said method comprising the steps of:

- a) providing a vehicle (7) with an image producing device (1) and a position determining device (4), said image producing device (1) comprising means for generating image data of surroundings of the vehicle and said position determining device (4) comprising means for generating vehicle position data;
- b) driving said vehicle over at least one road or street section (8);
- c) during the driving of the vehicle of step b), simultaneously collecting said image data with said image producing device (1) and acquiring said vehicle position data with said position determining device (4);
- d) analyzing said image data with an image processing means (2), in order to put together or assemble a road or street section description, wherein said road or street section description includes a course of the at least one road or street section (8) relative to the vehicle (7), a spacing (10) between a vehicle longitudinal axis (L) and a street or road edge (E), a width (12) of the at least one street or road section (8), a number of lanes (9) on the at least one road or street section (8), a width (11) of a lane (9) in which the vehicle (7) travels and a curvature of the at least one street or road section (8); and

e) correlating said vehicle position data and said road or street section description with a correlation means (5), in order to produce said road or street section data for said digital map.

33(new). The method as defined in claim 32, wherein said vehicle position data comprises at least one absolute position of said vehicle (7) and an orientation of said vehicle (7) in relation to a fixed first coordinate system (24).

34(new). The method as defined in claim 33, wherein said origin of said fixed first coordinate system (24) coincides with an origin of said digital map.

35(new). The method as defined in claim 32, wherein said road or street section description includes standing or parking space information, cycle lane information, traffic sign information, lane quality information, building information or alternative lane guidance.

36(new). The method as defined in claim 32, wherein the road or street section data includes a statement regarding a course of at least one road or street section (8) in relation to said fixed first coordinate system (24).

37(new). The method as defined in claim 32, further comprising comparing said road or street section data produced by said driving of said vehicle with pre-existing road or street section data from a pre-existing digital map (19) by means

of a comparison means (21) in order to detect contingent deviations and correcting or updating said pre-existing digital map with said contingent deviations obtained during the comparing.

38(new). The method as defined in claim 37, further comprising transmitting said contingent deviations or said road or street section data produced by said driving of said vehicle to a central station (26) for reception by the central station (26).

39(new). The method as defined in claim 19, 26 or 32, wherein said image producing device (1) comprises at least one camera.

40(new). The method as defined in claim 19, 26 or 32, wherein said image producing device (1) comprises a monocular image generating device.

41(new). The method as defined in claim 19, 26 or 32, wherein said image producing device (1) comprises a stereoscopic image generating device.

42(new). A device for producing road or street section data for a digital map, said device comprising

a vehicle (7) for traveling over roads or streets, said vehicle comprising an image producing device (1) for generating image data of surroundings of the vehicle and a position determining device (4) for generating vehicle position data in relation to a fixed first coordinate system (24);

image processing means (2) for analyzing said image data to produce a road or street section description, said road or street section description including a course of the at least one road or street section (8) relative to the vehicle (7), a spacing (10) between a vehicle longitudinal axis (L) and a street or road edge (E), a width (12) of the at least one street or road section (8), a number of lanes (9) on the at least one road or street section (8), a width (11) of a lane (9) in which the vehicle (7) travels, a curvature of the at least one street or road section (8), standing or parking space information, cycle lane information, lane quality information, building information or alternative lane guidance;

correlation means (5) for correlating said vehicle position data and said road or street section description in order to produce said road or street section data for said digital map in relation to said fixed first coordinate system (24); and

comparison means (21) for comparing said road or street section data that are produced with corresponding pre-existing road or street section data of a pre-existing digital map (19) in order to detect contingent deviations.

43(new). The device as defined in claim 42, further comprising communication means (23) for exchange of information entities to a central station (26) and for transmission of said road or street section data and/or said contingent deviations to said central station.

44(new). The device as defined in claim 42, further comprising an interface device for supplying said vehicle position data and said road or street section



description to said correlation means and wherein said interface device is a hardware device or a software device.